

# EMuRgency - New approaches for resuscitation support and training in the Euregio Meuse-Rhine

Citation for published version (APA):

Kalz, M., Skorning, M., Haberstroh, M., Gorgels, T., Klerkx, J., Vergnion, M., Hosmans, T., Van Poucke, S., Lenssen, N., Biermann, H., Schuffelen, P., Pijls, R., Ternier, S., De Vries, F., Van der Baaren, J., Parra, G., & Specht, M. (2012). EMuRgency - New approaches for resuscitation support and training in the Euregio Meuse-Rhine. *Resuscitation*, 83(S1), e37. <https://doi.org/10.1016/j.resuscitation.2012.08.094>

**DOI:**

[10.1016/j.resuscitation.2012.08.094](https://doi.org/10.1016/j.resuscitation.2012.08.094)

**Document status and date:**

Published: 15/10/2012

**Document Version:**

Other version

**Document license:**

CC BY-NC-SA

**Please check the document version of this publication:**

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

**General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

<https://www.ou.nl/taverne-agreement>

**Take down policy**

If you believe that this document breaches copyright please contact us at:

[pure-support@ou.nl](mailto:pure-support@ou.nl)

providing details and we will investigate your claim.

Downloaded from <https://research.ou.nl/> on date: 05 May. 2023

**Open Universiteit**  
[www.ou.nl](http://www.ou.nl)



## **EMuRgency – New approaches for resuscitation support and training in the Euregio Meuse-Rhine**

**Purpose of the study:** Cardiac arrest is an extremely time-critical emergency. In the Euregio Meuse-Rhine, the shared border region of the Netherlands, Belgium and Germany, bystander CPR is only performed in about 27% of the pre-hospital cases (1). Main reasons are described as a lack of knowledge, uncertainty and fear of laymen (2). The project EMuRgency aims to raise awareness about cardiac arrest and to increase the rate of bystander CPR before EMS (Emergency Medical Service) arrival.

**Materials and methods:** A smartphone notification system is currently developed. Registered trained rescuers will be localized in case of a cardiac arrest, notified and guided to the victim, if in direct vicinity (3). Low-threshold educational products are developed following the guidelines of the European Resuscitation Council (ERC). A flexible preparatory E-Learning course will be published as an Open Educational Resource (OER). Furthermore, mobile training and support apps are developed and evaluated to support continued training of CPR skills in non-formal contexts and facilitate AED use and awareness. (4) Moreover, an inter-regional school-network is currently established.

**Results/Conclusion:** The EMuRgency project is a medical-based socio-technological innovation project. An increased rate and quality of CPR begun before arrival of the EMS is sought after. In all three countries (B, D, NL) a dispatch-center controlled smartphone notification system will be established in accordance with each legal system and in support of the different processes of the local dispatch centers. To increase awareness of the public we are seeking to employ existing public displays with intelligent interaction modes in the region.

### **References**

- [1] Fries M, Beckers S, Bickenbach J, Skorning M, Krug S, Nilson E, Rossaint R, Kuhlen R. Incidence of cross-border emergency care and outcomes of cardiopulmonary resuscitation in a unique European region. *Resuscitation* 2007. 72(1):66-73
- [2] Swor R, Khan I, Domeier R, Honeycutt L, Chu K, Compton S. CPR Training and CPR Performance: Do CPR-trained Bystanders Perform CPR?. *Academic Emergency Medicine* 2006.13:596-601
- [3] Ringh M, Fredman D, Nordberg P, Stark T, Hollenberg J. Mobile phone technology identifies and recruits trained citizens to perform CPR on out-of-hospital cardiac arrest victims prior to ambulance arrival. *Resuscitation* 2011. 82(12): 1514-8
- [4] Soara, J, Monsieurs K.G., Ballancec J.H.W., Barelli A., Biarente D., Greiff R., Handley A.J., Lockey A.S., Richmond S., Ringsted C., Wylliek J.P., Nolan J.P., Perkins G.D. European Resuscitation Council. Guidelines for Resuscitation 2010 Section 9. Principles of education in resuscitation. *Resuscitation* 81 (2010) 1434–1444.

## **Affiliations**

- 1) Maastricht University, Department of Health Education and Promotion, Heerlen, The Netherlands
- (2) University Hospital Aachen, Department of Anaesthesiology, Aachen, Germany
- (3) RWTH Aachen, Institute of Information Management in Mechanical Engineering (IMA), Aachen, Germany
- (4) Maastricht University, Department of Health Education and Promotion, Maastricht, The Netherlands
- (5) KU Leuven, HCI Research Group, Leuven, Belgium
- (6) Hospital Citadelle, Service des Urgences et du SMUR, Liège, Belgium
- (7) Centre de Cooperation Technique et Pedagogique, Liège, Belgium
- (8) Ziekenhuis Oost-Limburg, Afdeling Kritieke Diensten, Genk, Belgium

## **Authors**

Marco Kalz (1)

Max Skorning (2) Presenting

Max Haberstroh (3)

Ton Gorgels (4)

Joris Klerkx (5)

Michel Vergnion (6)

Tony Hosmans (7)

Sven Van Poucke (8)

Niklas Lenssen (2)

Henning Biermann (2)

Petra Schuffelen (4)

Ruud Pijls (4)

Stefaan Ternier (1)

Fred De Vries (1)

John Van der Baaren (1)

Gonzalo Parra (5)

Marcus Specht (1)